Abstract

A rotary-linear system is configured to operate an associated tool. The system includes a rotary-linear actuator having first and second portions that can move linearly and/or rotationally relative to each other, such as about a central axis extending through the actuator. An elongated drive rod extends axially through at least a portion of the actuator, which is operative to rotate about a longitudinal axis thereof generally independently of the actuator. While the rotation of the drive rod can be independent of movement of the actuator, such rotation can be controlled based on the position and/or movement of the actuator. An end of the drive rod near a distal end of the actuator is operative to actuate an associated tool, such as can be mounted at a distal end of the actuator.